

on which the carriage for the passengers was mounted had been in perfect order, we think it would not have been very difficult to write."

#### FURTHER EXPERIMENTS ON THE RAIL WAY.

After the lengthened accounts which have appeared in this and other papers of the experiments which have been made on the Railway, we should not have ventured to call the attention of our readers again to the subject, if we were not convinced that the first experiments that were tried afforded *no idea of the power actually possessed by locomotive engines*. By the original conditions issued by the directors, it was required that the carriages should draw three times their own weight, and proceed at the rate of ten miles an hour, and this was at first thought to be a considerable task. Subsequent experiments have, however, proved that this is nothing in comparison with what the carriages really can perform. We stated last week that the prize engine, the *Rocket*, had drawn 20 tons, at the rate of from 13 to 20 miles per hour, and since then we have seen it draw the still more astonishing load of 42 tons; or ten times its own weight, at the rate of 15 miles an hour, which is by far the greatest task that has ever been performed by a locomotive carriage. This feat it performed on Thursday last. At the commencement of the experiments, a load of 33 tons was attached to the carriage, which it drew along for several miles at the rate of  $13\frac{1}{2}$  miles an hour. An additional load was then put on, which raised it to  $37\frac{1}{2}$  tons, and with this it proceeded at the rate of  $13\frac{3}{4}$  miles an hour, its speed constantly increasing as it got into practice. The enormous load of 42 tons was then put on, and with this it proceeded at the average rate of 14 miles an hour! Another class of experiments was afterwards tried in order to ascertain with what load, and at what rate it would ascend the inclined plane at Huyton, when it was found that with 11 tons it travelled the mile and a half in 5 minutes and 35 seconds, or 16 miles an hour, and with 16 tons in 7 minutes and 10 seconds, or  $12\frac{1}{2}$  miles an hour. These performances far exceed the warmest anticipations of the friends of locomotive carriages, and afford additional and incontestible evidence of their superiority to all the modes of conveyance which at present exist.—The Directors have ordered four locomotive engines on Mr. Booth's principle of boiler, that of the *Rocket*, to be built by Messrs. Robert Stephenson and Co. of Newcastle.—*Liverpool Times*.

The Editor of the *London Mechanics' Magazine*, remarking upon the recent trial of Locomotive Engines at Liverpool, observes: